



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/686,822	10/12/2000	Harry J. Chmielewski	53394.000443	5377

7590 07/13/2006

Christopher C. Campbell
Hunton & Williams
Suite 1200
1900 K Street, N.W.
Washington, DC 20006

EXAMINER

ANDERSON, CATHARINE L

ART UNIT	PAPER NUMBER
----------	--------------

3761

DATE MAILED: 07/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/686,822

Applicant(s)

CHMIELEWSKI, HARRY J.

Examiner

C. Lynne Anderson

Art Unit

3761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,6,7,9-13,17,18,20,22 and 24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,6,7,9-13,17,18,20,22 and 24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9 May 2006 has been entered.

Response to Arguments

Applicant's arguments filed 9 May 2006 have been fully considered but they are not persuasive.

In response to the applicant's argument that the prior art fails to disclose the weight ratio of superabsorbent polymer and hydrotalcite, it is noted that Harada discloses the ratio of superabsorbent polymer and denaturing agent in column 17, lines 7-14, and the ratio of hydrotalcite and denaturing agent in column 18, lines 15-25. The ratio of superabsorbent polymer and hydrotalcite may be determined from the ratios given with respect to the denaturing agent. Harada therefore discloses a ratio of superabsorbent polymer and hydrotalcite that fulfills the claimed limitation.

In response to the applicant's argument that the present invention defines compositions that exhibit superior characteristics than the prior art, it is noted that the prior art invention (i.e. the invention of Kajikawa as modified by Harada) comprises the

identical composition as the claimed invention and therefore exhibits the same physical characteristics (see MPEP 2112.01).

In response to the applicant's arguments that the examples given in the prior art do not anticipate the claimed invention, it is noted that patents are relevant as prior art for all they contain (see MPEP 2123). While the preferred embodiments of the prior art may fall outside the claimed ranges, the broad disclosure of the prior art fulfills all the limitations of the claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 6, 7, 9, and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kajikawa et al. (5,478,879) in view of Harada et al. (6,150,469).

Kajikawa discloses all aspects of the claimed invention but remains silent as to the amount of hydrotalcite present in the composition.

With respect to claims 1 and 6, Kajikawa discloses a superabsorbent composition comprising an underneutralized superabsorbent polymer in which less than 70% of the functional groups are neutralized, as disclosed in column 5, lines 49-51, and column 24, Claim 13. The superabsorbent polymer is neutralized by sodium, as disclosed in column 15, Example 4. The composition further comprises a layered double hydroxide anionic clay, hydrotalcite, as disclosed in column 8, line 54.

Harada discloses the use of hydrotalcite in a superabsorbent composition, as described in column 17, lines 47-65. The superabsorbent polymer and hydrotalcite are present in a ration ranging from 1:1 to 1:10, as disclosed in column 17, lines 7-14, and column 18, lines 19-25, to prevent the superabsorbent polymer to react with the additives, as disclosed in column 18, lines 25-32.

It would therefore be obvious to one of ordinary skill in the art at the time of invention to provide the superabsorbent polymer and hydrotalcite of Kajikawa in a ratio ranging from 1:1 to 1:10 to prevent the superabsorbent polymer from reacting with the additive, as taught by Harada.

With respect to claim 7, the claim discloses a product-by-process limitation. The claim is drawn to an article, and the final product disclosed by Kajikawa is structurally identical to the product claimed. Kajikawa therefore discloses the article disclosed in the claim.

With respect to claims 21 and 22, Kajikawa discloses less than 40% of the functional groups are neutralized, as disclosed in column 5, lines 49-51, and column 24, Claim 13.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kajikawa et al. (5,478,879) in view of Harada et al. (6,150,469) as applied to claim 1 above, and further in view of Jones, Sr. (3,794,034).

Kajikawa discloses all aspects of the claimed invention but remains silent as to the pH range. Jones discloses an absorbent article having a pH in the range of 3.5 to

Art Unit: 3761

6.0, as described in column 1, lines 34-40. This pH range is preferred for absorbent articles because it inhibits bacterial growth, as disclosed in column 1, lines 52-56. It would therefore be obvious to one of ordinary skill in the art at the time of invention to construct the composition of Kajikawa with a pH in the range of 3.5-6.0, as taught by Jones, to inhibit bacterial growth.

Claims 10-12, 17-18, 20, and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kajikawa et al. (5,478,879) in view of Harada et al. (6,150,469), and further in view of Masaki et al. (5,821,179).

Kajikawa discloses all aspects of the claimed invention but remains silent as to the amount of hydrotalcite present in the composition.

With respect to claims 10, 17, and 20, Kajikawa discloses a superabsorbent composition comprising an underneutralized superabsorbent polymer in which less than 70% of the functional groups are neutralized, as disclosed in column 5, lines 49-51, and column 24, Claim 13. The superabsorbent polymer is neutralized by sodium, as disclosed in column 15, Example 4. The composition further comprises a layered double hydroxide anionic clay, hydrotalcite, as disclosed in column 8, line 54. Kajikawa teaches the use of the composition in a diaper, as described in column 1, lines 17-19, but remains silent as to the construction of the diaper.

Harada discloses the use of hydrotalcite in a superabsorbent composition, as described in column 17, lines 47-65. The superabsorbent polymer and hydrotalcite are present in a ration ranging from 1:1 to 1:10, as disclosed in column 17, lines 7-14, and

Art Unit: 3761

column 18, lines 19-25, to prevent the superabsorbent polymer to react with the additives, as disclosed in column 18, lines 25-32.

It would therefore be obvious to one of ordinary skill in the art at the time of invention to provide the superabsorbent polymer and hydrotalcite of Kajikawa in a ratio ranging from 1:1 to 1:10 to prevent the superabsorbent polymer from reacting with the additive, as taught by Harada.

Masaki discloses an absorbent article 100, as shown in figure 12, comprising a liquid pervious topsheet 1, a liquid impervious backsheet 3, and an absorbent core 2. The absorbent core 2 includes fluff pulp 12 and a superabsorbent composition 16, as shown in figure 1B. The mixture of pulp and superabsorbent reduces gel blocking, as disclosed in column 7, lines 7-13.

It would therefore be obvious to one of ordinary skill in the art at the time of invention to produce an absorbent article comprising the superabsorbent composition of Kajikawa with the structure taught by Masaki to reduce gel blocking of the superabsorbent composition.

With respect to claims 11-12, Kajikawa, as modified by Masaki, discloses all aspects of the claimed invention with the exception of the superabsorbent present in the amount ranging from about 0.2 to about 0.8 grams per gram of fluff pulp. It would have been obvious to one of ordinary skill in the art at the time of invention to include the superabsorbent in the range of about 0.2 to about 0.8 grams per gram of fluff pulp, since it has been held that where the general conditions of the claim (i.e. a ratio of

superabsorbent to fluff pulp) are known in the art, finding the optimum or workable ranges requires only routine skill in the art.

With respect to claim 18, the claim discloses a product-by-process limitation. The claim is drawn to an article, and the final product disclosed by Kajikawa is structurally identical to the product claimed. Kajikawa therefore discloses the article disclosed in the claim.

With respect to claims 23 and 24, Kajikawa discloses less than 40% of the functional groups are neutralized, as disclosed in column 5, lines 49-51, and column 24, Claim 13.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kajikawa et al. (5,478,879), Harada et al. (6,150,469), and Masaki et al. (5,821,179) as applied to claim 10 above, and further in view of Jones, Sr. (3,794,034).

Kajikawa, as modified by Harada and Masaki, discloses all aspects of the claimed invention but remains silent as to the pH range. Jones discloses an absorbent article having a pH in the range of 3.5 to 6.0, as described in column 1, lines 34-40. This pH range is preferred for absorbent articles because it inhibits bacterial growth, as disclosed in column 1, lines 52-56. It would therefore be obvious to one of ordinary skill in the art at the time of invention to construct the composition of Kajikawa with a pH in the range of 3.5-6.0, as taught by Jones, to inhibit bacterial growth.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. Lynne Anderson whose telephone number is (571) 272-4932. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tanya Zalukaeva can be reached on (571) 272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CNA
cla
July 7, 2006

TATYANA ZALUKAEVA
SUPERVISOR/PRIMARY EXAMINER

